

## CHAPTER 3.6

# Hazards and Hazardous Materials

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This Chapter discusses the potential for the Shasta River Watershed-wide Permitting Program (Program) to cause hazards or to produce, emit, or encounter hazardous materials and identifies mitigation measures for those impacts determined to be potentially significant.

### 3.6.1 Setting

#### Hazardous Materials

Materials and waste may be considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode or generate vapors when mixed with water (reactivity). The term “hazardous material” is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.<sup>1</sup> In some cases, past industrial or commercial uses on a site can result in spills or leaks of hazardous materials and petroleum to the ground; thus resulting in soil and groundwater contamination. Federal and state laws require that soils having concentrations of contaminants such as lead, gasoline, or industrial solvents that are higher than certain acceptable levels must be handled and disposed as hazardous waste during excavation, transportation, and disposal. California Code of Regulations (CCR), title 22, § 66261.20-24 contains technical descriptions of characteristics that would cause a soil to be classified as a hazardous waste. The use of hazardous materials and disposal of hazardous wastes are subject to numerous laws and regulations at all levels of government.

Except in residential areas (for which hazardous materials usage is generally minimal), the types of bulk hazardous materials currently stored and/or used in the Program Area would most likely be petroleum hydrocarbons found in underground storage tanks, such as those at service stations or auto repair shops; or in aboveground storage tanks, such as those at farm or ranch operation centers. Within Siskiyou County, there are 62 known active leaking underground storage tank (LUST) sites; 32 active cease and desist order (CDO) and corrective action order (CAO) sites; and one hazardous waste and substances site. The majority of these sites are located in the cities of Weed and Yreka; however, several of the sites are located elsewhere within the Shasta River watershed (Cal-EPA, 2006). Of relevance to the Program would be any underground storage tanks within or near riparian areas that could be affected by Covered Activities.

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<sup>1</sup> Health and Safety Code, § 25501(o).

## Wildland Fire Conditions

The combination of highly flammable vegetative fuel, long dry summers and steep slopes, and the intermix of urban and wildland land uses creates a natural hazard of wildland fires in many areas of the Shasta River watershed. Fuel types range from grassy flats and hills to timbered mountains. Wildland fires can result in death, injury, economic losses, and a large public investment in fire fighting efforts. Woodlands and other natural vegetation can be destroyed resulting in the loss of timber, wildlife habitat, scenic quality, and recreational opportunities. Soil erosion, sedimentation of streams and waterways, and downstream flooding can also result.

The California Department of Forestry and Fire Protection (CDF) has mapped much of the Shasta River watershed as “wildland areas that may contain substantial forest fire risks and hazards,” pursuant to Public Resources Code, § 4125 (CDF, 2000). Areas not within this map classification include the agricultural areas of the northern Shasta Valley and along old Highway 99, and the cities of Weed, Yreka, and Montague.

Wildland fire protection services for unincorporated Siskiyou County are provided by CDF. CDF’s Siskiyou Unit manages seven fire stations, and one conservation camp. During fire season, 13 Schedule “B” engines and two dozers are staffed. The County provides funding under the Amador Plan for three stations to remain open year-round (CDF, 2005). Siskiyou Unit Battalion 2, Shasta Valley, provides wildland fire protection services within the vicinity of the Program Area (CDF, 2005).

## 3.6.2 Regulatory Framework

### State and Federal Laws and Regulations

**Table 3.6-1** provides a brief overview of federal and state hazardous materials laws and regulations followed by a more detailed discussion.

#### ***Soil Contamination***

Soils having concentrations of contaminants higher than certain acceptable levels must be handled and disposed as hazardous waste when excavated. CCR, title 22, § 66261.20-24 contains technical descriptions of characteristics that would classify a soil as a hazardous waste.

#### ***Hazardous Materials Management***

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires that businesses handling hazardous materials prepare a business plan. In January 1996, the California Environmental Protection Agency (Cal-EPA) adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The program has six elements: hazardous waste generators and hazardous waste on-site treatment; underground storage tanks (USTs); aboveground storage tanks (ASTs); hazardous materials release response plans and inventories; risk management and prevention programs; and Unified Fire Code hazardous materials

**TABLE 3.6-1  
FEDERAL AND STATE LAWS AND REGULATIONS REGARDING HAZARDOUS MATERIALS**

Hazardous Materials Management	State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These laws require hazardous materials users to prepare written plans, such as Hazard Communication Plans, Hazardous Materials Business Plans, and Chemical Hygiene Plans. Laws and regulations require hazardous materials users to store these materials appropriately and to train employees to manage them safely. A number of agencies participate in enforcing hazardous materials management requirements.
Hazardous Waste Handling	The California Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous material waste. These laws impose "cradle-to-grave" regulatory systems that require generators of hazardous materials waste to handle it in a manner that protects human health and the environment to the extent possible. DTSC permits and oversees hazardous materials waste treatment, long-term storage, and disposal facilities.
Hazardous Materials Transportation	The U.S. Department of Transportation (U.S. DOT) regulates the transportation of hazardous materials between states. Within California, the state agencies with primary responsibility for enforcing federal and state regulations, and for responding to transportation emergencies, are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.
Soil and Groundwater Contamination	The Comprehensive Environmental Response, Compensation, and Liability Act and associated Superfund Amendments provide the U.S. Environmental Protection Agency (USEPA) with the authority to identify hazardous sites, to require site remediation, and to recover the costs of site remediation from polluters. California has enacted similar laws intended to supplement the federal program. DTSC is primarily responsible for implementing California's Superfund Law.

management plans and inventories. The plan is implemented at the local level, and the agency responsible for the implementation of the Unified Program is called the Certified Unified Program Agency (CUPA).

### ***Hazardous Waste Management and Handling***

Under the Resource Conservation and Recovery Act (RCRA), individual states may implement their own hazardous waste programs in lieu of RCRA as long as the state program is at least as stringent as federal RCRA requirements. USEPA must approve state programs intended to implement federal regulations. In California, Cal-EPA and California Department of Toxic Substances Control (DTSC), a department within Cal-EPA, regulate the generation, transportation, treatment, storage, and disposal of hazardous wastes. The USEPA approved California's RCRA program, called the Hazardous Waste Control Law (HWCL), in 1992. DTSC has primary hazardous material regulatory responsibility, but can delegate enforcement responsibilities to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the HWCL.

The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe the management of hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in ordinary landfills. Hazardous waste manifests must be

retained by the generator for a minimum of three years. Hazardous waste manifests provide a description of the waste, its intended destination, and regulatory information about the waste. A copy of each manifest must be filed with the state. The generator must match copies of hazardous waste manifests with receipts from treatment, storage, and disposal facilities.

Contaminated soils and other hazardous materials removed from a site during construction or remediation may need to be handled as hazardous waste.

### ***Hazardous Materials Transportation***

The State of California has adopted U.S. Department of Transportation (DOT) regulations for the intrastate movement of hazardous materials. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing through the state. The regulations that govern these activities are in CCR title 26.

The two state agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol (CHP) and Caltrans. CHP enforces hazardous material and hazardous waste labeling and packing regulations to prevent leakage and spills of material in transit and to provide detailed information to cleanup crews in the event of an accident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are the responsibility of CHP, which conducts regular inspections of licensed transporters to assure regulatory compliance. Caltrans has emergency chemical spill identification teams at as many as 72 locations throughout the state that can respond quickly in the event of a spill.

Common carriers are licensed by CHP, pursuant to California Vehicle Code, § 32000. This section requires the licensing of every motor (common) carrier who transports, for a fee, in excess of 500 pounds of hazardous materials at one time, and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards.

Every hazardous waste package type used by a hazardous materials shipper must undergo tests that imitate some of the possible rigors of travel. Every package is not put through every test. However, most packages must be able to be kept under running water for a time without leaking; dropped, fully loaded, onto a concrete floor; compressed from both sides for a period of time; subjected to low and high pressure; and frozen and heated alternately.

### ***Fire Management***

The CDF *Siskiyou Unit Fire Management Plan* addresses wildfire hazards in Siskiyou County. In line with the stated goals of the California Fire Plan and the mission of CDF, maintaining life and property are the highest priorities of the Plan. The Plan is a dynamic, working plan that provides for an ongoing assessment of the fire situation in the Siskiyou Unit. The document includes stakeholder contributions and priorities and identifies targets for pre-fire management as defined by those who live and work with the local fire problem (CDF, 2005).

## Local

### ***Siskiyou County Environmental Health Services Division***

The Siskiyou County Public Health Department, Environmental Health Services Division's role is to protect the health and welfare of the general public and environment through prevention and control of disease and pollutants. The Environmental Health Services Division is divided into three programs: Consumer Protection, Hazardous Materials Management/Certified Unified Program Agency (CUPA), and Land Use.

The Hazardous Materials Management Group implements the Unified Program (UP) at the local government level pursuant to CCR, title 27, § 15110(a)(2). The Environmental Health Services became the CUPA on January 1, 1997. The Environmental Health Services Division is certified by the Cal-EPA Secretary to implement the Unified Program specified by Health and Safety Code (Health & Safety Code, § 25404(a)(1)(A)) within Siskiyou County. The CUPA program regulates underground tanks, hazardous materials (including but not limited to: hazardous substances, hazardous waste, and any material which a handler or the CUPA has reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment (Health & Safety Code, § 25501) and any unauthorized release of hazardous material. In addition, the Hazardous Material Management Group regulates final disposal/transfer activities of solid waste (Siskiyou County, 2006). A county-wide 911 system is in place, which is serviced in unincorporated areas of by the Siskiyou County Sheriff's Department.

## 3.6.3 Impacts and Mitigation Measures

### **Significance Criteria**

This section addresses potential Program hazards and hazardous materials impacts. The significance criteria are based on guidance regarding significant environmental effects in CEQA *Guidelines*, §§ 15065 and 15126 and Appendix G. Specifically, an impact related to hazards and hazardous materials a project or program could cause would be significant if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- For a program located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the program would result in a safety hazard for people residing or working in the Program Area;

- For a project within the vicinity of a private airstrip, the program would result in a safety hazard for people residing or working in the Program Area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code, § 65962.5 and, as a result, would create a significant hazard to the public or the environment; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

## Impact Analysis

In regard to the first six significance criteria listed above, the Initial Study for the Program (Appendix D) found either no impact or a less than significant impact, and therefore they are not further analyzed in this Draft Environmental Impact Report (EIR). The impacts associated with the remaining two criteria (i.e., Program sites located on hazardous materials sites and exposure of people or structures to wildland fires) that the Initial Study found to be potentially significant are discussed below.

### **Impact 3.6-1: Construction activities could result in discovery and release of previously unidentified hazardous materials into the environment (Significant).**

Covered Activities would primarily occur in agricultural areas within the Shasta Valley and would not likely be located on known hazardous materials contamination sites. However, construction associated with some of the Covered Activities (e.g., installation of fish screens and the removal of stream barriers) may require some limited ground disturbance that could disturb previously unidentified subsurface contamination.

While, the potential to encounter, release, and mobilize previously unidentified hazardous materials would be relatively low, the mere potential to do so renders this impact significant.

### ***Mitigation Measures Proposed as Part of the Program***

**Mitigation Measure 3.6-1a:** The Program's incidental take permit (ITP) General condition (b) (Article XIII.E.1) states that the Shasta Valley Resource Conservation District (SVRCD) "and any sub-permittee shall immediately stop, contain, and clean-up any fuel, lubricants, or other hazardous materials that leak or spill while engaged in a Covered Activity. SVRCD or the sub-permittee shall notify the Department immediately of any leak or spill of hazardous materials into a stream or in a place where it can pass into a stream. While engaged in a covered activity, SVRCD and all sub-permittees shall store and handle hazardous materials at least 150 feet away from the edge of mean high water elevation of any stream and properly dispose any unused or leftover hazardous materials offsite. Exceptions to this provision may be provided in individual sub-permits for pre-existing structures with adequate containment facilities." Conditions 68 through 75 of the Program's

streambed alteration agreement Master List of Terms and Conditions (MLTC) contain similar provisions.

### ***Mitigation Measures Identified in This Draft EIR***

**Mitigation Measure 3.6-1b:** SVRCD shall prepare a standard Hazardous Substance Discovery Plan that shall include provisions that would be implemented if any subsurface hazardous materials are encountered during construction. Provisions outlined in the Plan shall be followed by SVRCD and/or any sub-permittee and shall include immediately stopping work in a contaminated area and contacting appropriate resource agencies, including the California Department of Fish and Game's (CDFG) designated monitor, upon discovery of subsurface hazardous materials. The plan shall include the phone numbers of county and state agencies and primary, secondary, and final cleanup procedures. The Hazardous Substance Discovery Plan shall be submitted to CDFG for review and approval prior to the commencement of Program construction activities.

### ***Level of Significance after Mitigation***

Mitigation Measures 3.6.1a and 3.6.1b would reduce this impact to a less than significant level.

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### **Impact 3.6-2: Program construction activities could ignite dry vegetation and start a wildland fire (Significant).**

The majority of the Program activities would occur in agricultural areas within Shasta Valley, and as such, there would be little risk of wildfire associated with them. However, some activities may occur on the urban or wildland fringe that is susceptible to wildland fires. Heat or sparks from construction vehicles or equipment have the potential to ignite dry vegetation and cause a fire. Therefore, a high to moderate fire hazard would likely exist during construction of Program activities between late spring and early fall. This would be a significant impact.

### ***Mitigation Measures Proposed as Part of the Program***

No mitigation measures are included in the proposed MLTC or ITP.

### ***Mitigation Measures Identified in This Draft EIR***

**Mitigation Measure 3.6-2:** Water tanks and/or fire extinguishers shall be sited at Covered Activity construction sites and shall be available for fire protection during the fire season (approximately late spring to early fall). All construction vehicles shall have fire suppression equipment and construction personnel shall be required to park vehicles away from dry vegetation. SVRCD and/or sub-permittees shall contact and coordinate with CDF to determine the minimum amounts of fire equipment to be carried on the vehicles and appropriate locations for the water tanks/fire extinguishers. SVRCD and/or sub-permittees shall submit verification of its consultation with the CDF to CDFG.

### ***Level of Significance after Mitigation***

Mitigation Measure 3.6.2 would reduce this impact to a less than significant level.

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## **References**

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